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(54) Title: COPPER CMP SLURRY COMPOSITION

(57) Abstract: A composition that rapidly passivates copper-containing surface to yield a uniform layer of insoluble copper oxide, the composition being useful in chemical-mechanical planarization of copper-containing surfaces is disclosed. The composition is a solution having a pH of equal to or greater than 9 and having an oxidation potential sufficient to oxidize the surface to form non-soluble copper oxides. Also disclosed are methods of making and using the composition.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL04/00310

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B24B 1/00
US CL : 451/35,41, 438/692, 106/3

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 451/35,41, 438/692, 106/3

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Composition, oxidation potential, copper, copper oxide, pH

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,447,371 B2 (BRUSIC KAUFMAN et al) 10 September 2002 (10.09.2002), See the entire document.	1,26-31,37,41-47
A	US 5,800,577 A (KIDO) 01 September 1998 (01.09.1998)	1-52
A	US 5,840,629 A (CARPIO) 24 November 1998 (24.11.1998)	1-52
A	US 6,313,039 B1 (SMALL et al) 06 November 2001 (06.11.2001)	1-52

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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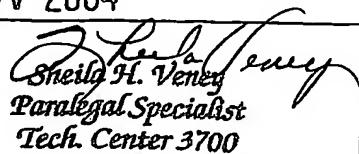
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